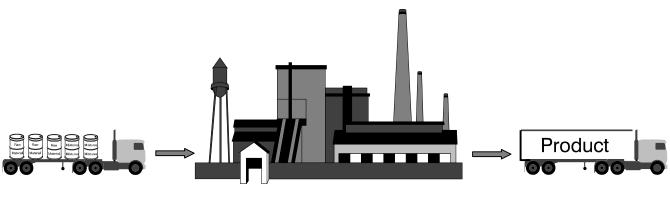
New Jersey Department of Environmental Protection
Office of Pollution Prevention and Right To Know
http://www.state.nj.us/dep/opppc/



NEW JERSEY RELEASE AND POLLUTION PREVENTION REPORT (RPPR or DEQ-114)

2005 INSTRUCTIONS



Inputs Outputs

REMINDER

Electronic Reporting is Mandatory for Reporting Year 2005 and Submission is due by

JULY 1, 2006



March 2006

Dear New Jersey Employer:

This is the New Jersey Release and Pollution Prevention Report (RPPR) Instructions for Reporting Year 2005. A Release and Pollution Prevention Report must be submitted by every "employer," as defined in the New Jersey Worker and Community Right to Know Regulations (N.J.A.C. 7:1G-1.2), that is subject to the reporting requirements of SARA Title III, Section 313 - the federal Toxic Chemical Release Inventory (TRI). (SARA Title III is also known as the Emergency Planning and Community Right-to-Know Act of 1986 [EPCRA]). All substances subject to reporting under the TRI, whether reported on Form R or Form A, must be reported on the Release and Pollution Prevention Report for 2005. A complete list of reportable substances may be found on the Office of Pollution Prevention and Right To Know's website at http://www.state.nj.us/dep/opppc/figdoc.htm.

The Department of Environmental Protection (DEP) uses the RPPR to collect chemical throughput, multi-media environmental release, on-site waste management, off-site transfer, and pollution prevention information. The completed report is due to the DEP by July 1, 2006. It is important to note that submission of an electronic RPPR is **mandatory** for reporting year 2004, and thereafter. Also a standard (5%) for the difference between the inputs and outputs has been established. Rule changes were adopted that specify these requirements (see the New Jersey Register, Tuesday, January 18, 2005, page 280). Reporting is accomplished on the DEP's electronic reporting website found at http://www.njdeponline.com. Hardship exemptions from electronic reporting will be approved on a case-by-case basis.

The New Jersey threshold for reporting is 10,000 pounds for each reportable substance manufactured, processed, or otherwise used at the facility during reporting year 2005, unless the reportable substance is one of the regulated Persistent, Bioaccumulative and Toxic (PBT) substances, which have a lower threshold. The annual pollution prevention progress reporting requirements for all facilities that have prepared a Pollution Prevention (P2) Plan and have submitted a P2 Plan Summary (DEP-113) to the DEP are satisfied by using the Pollution Prevention Process-level Data Worksheet (P2-115), or alternatively the RPPR Sections C and D, as incorporated into the RPPR.

Please note that this will be the last year that the Office will mail out complete instructions to regulated facilities. In the future, we will mail out only a reminder letter with appropriate links to our website. Between the electronic reporting and the website access, regulated employers should be able to access all information needed to submit from any Internet connection.

If assistance is required with this report, please contact the Office of Pollution Prevention and Right To Know at (609) 777-0518. Thank you in advance for your cooperation.

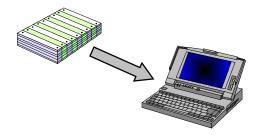
Sincerely,
Michael Dinione

Michael DiGiore, Chief

Office of Pollution Prevention and Right To Know

CHECK OUT WHAT'S NEW...





Pursuant to the readoption of the Worker and Community Right To Know (W&CRTK) rules on January 18, 2005 (see the New Jersey Register, page 280), effective Reporting Year 2004, and thereafter, any facility required to submit the RPPR shall do so electronically using the Department's online reporting website. The DEP has been working to make the website more user friendly and easier to file the NJ Release and Pollution Prevention Report (RPPR) online. It's quick and easy. Simply follow these steps:

- 1. On the Internet, go to http://www.njdeponline.com
- 2. Click the **Continue** button.
- 3. A User ID and User PIN are required for access to the e-reporting portal. Register by clicking on the "Need an ID?" hyperlink, then the "Create New User Profile" hyperlink. Fill out all user information. Scroll down to #4 and for Add Program select "Right to Know and Pollution Prevention." Then enter the facility's 11-digit CRTK Facility ID number in the box. (NOTE: DEP does not have a record of your USER ID and PIN. It is the responsibility of the user to maintain and remember these access codes.)
- 4. Click the **Submit Request** button.
- 5. A screen will appear stating that your User Profile ID and PIN Request is granted. Click the button.
- 6. Enter your User ID and PIN.
- 7. Click the **Login** button.
- 8. On the NJDEP Electronic Data Transfer Web Site, select the "Release and Pollution Prevention Report and Pollution Prevention Plan Summary" radio button and click the **Continue** button.
- 9. Select the highlighted facility and click the **Access Facility** button.
- 10. Click on the **Create New Report** button.
- 11. Enter the four-digit reporting year (i.e., 2005). Select the "Release and Pollution Prevention Report" option by choosing its radio button and click the **Continue** button.
- 12. Complete the 2005 RPPR.
- 13. Certify and submit it to the DEP online by clicking on the "Certification and Submittal" button and follow the required steps. The person that certifies the report may need to create his or her own user profile.
- 14. Print a copy for your records using the printer icon (not the web browser's print features) and keep it at your site. Check to make sure that the electronic signature is correct.
- 15. Mail a copy of the printed and signed version to your Right to Know County Lead Agency (see RPPR Appendix D online for the County Lead Agency's address).

For additional information or assistance in completing the eRPPR, please call (609) 777-0518 during business hours (8:00 a.m. – 5:00 p.m.) or attend the *Complying with the Pollution Prevention Act* workshop scheduled for Wednesday, April 5, 2005 at Rutgers.



Check it out!

ATTENTION TRI Form R & Form A Reporters

If you submit your 2005 <u>federal</u> Toxic Chemical Release Inventory (TRI) Form R and/or Form A report to the USEPA on diskette or via Central Data Exchange (CDX) using USEPA's Toxics Release Inventory - Made Easy (TRI-ME) 2005 software, the DEP will accept a copy of the same data on a diskette or CD, <u>accompanied by</u> a copy of the certification letter that you must also file with USEPA. This will fulfill the federal requirement to provide your TRI Form R and/or Form A report(s) to the State of New Jersey.

<u>NOTE:</u> Only the <u>federal</u> <u>TRI</u> <u>data</u> may be submitted on diskette or CD. The NJ 2005 Release and Pollution Prevention Report must be submitted electronically using the eRPPR online submission module found at DEP Online (http://www.njdeponline.com).

PLEASE NOTE!

If you have been mailed this 2005 Release and Pollution Prevention Report (RPPR), you must complete and submit an electronic RPPR (eRPPR) by July 1, 2006. See page 2, section I.D. "Who Must Submit the RPPR?" for more details on the reporting requirements.

- Be advised that it is mandatory to complete and submit the 2005 RPPR by using the electronic DEP ONLINE submission process (New Jersey Administrative Code 7:1G-5.3).
- Be sure to return the *original paper version* of the RPPR to the DEP <u>only if</u> you receive a hardship exemption from the electronic reporting requirements from the DEP. You will have to call the Office at (609) 777-0518 to be mailed an original copy of the reporting forms.
- DO Be sure to complete all Sections (A, B, and P2-115 or C and D), as appropriate. If you have any questions about this RPPR, call the Office of Pollution Prevention and Right To Know at (609) 777-0518.
- Round off estimated quantities to the nearest pound in Section B, questions 4 through 22, and the P2-115 process-level data worksheet. You may use decimal places *only* for the Persistent, Bioaccumulative and Toxic (PBT) substances.
- **DO** Check RPPR Appendices B and C online at http://www.state.nj.us/dep/opppc/figdoc.htm for the updated list of all reportable substance.
- Be sure to give diligent review of the "Self-Verification of Materials Accounting Data Worksheet" as it displays in the eRPPR reporting module. Check that your estimates are reasonable and comply with your expected level of data quality and accuracy. The W&CRTK rule adoption of January 18, 2005 requires no more than a 5% difference between inputs and outputs.
- **DO** Exercise due diligence in completing the entire RPPR and be sure that all data are correctly entered!
- **DO NOT** Submit a paper copy of the RPPR that is submitted electronically. If you must submit an RPPR for another regulated facility that must report for 2005 and did not receive these instructions, contact the Office of Pollution Prevention and Right To Know at (609) 777-0518.
- **DO NOT** Submit an RPPR report for Methyl Ethyl Ketone, CAS No. 78-93-3, as it was delisted from the Toxic Chemical List by the USEPA on June 30, 2005 in the Federal Register (70 FR 37698).
- **DO NOT** Apply any unit of measurement other than pounds in Section B, questions 4 through 22. Note the exception that the unit of measurement for "Dioxin and Dioxin-like Compounds" is grams and not pounds.
- DO NOT Use range codes A, B or C as found on the USEPA Form R when estimating any quantity of a release, on-site waste management, or off-site transfer on the RPPR Section B, questions 12 through 21, or on the P2-115 of this RPPR; enter only whole numbers as determined by your best estimate (unless you are reporting a PBT; then you may report fractions of pounds using a decimal place).

Important Changes/Updates for Reporting Year 2005

The following changes, corrections and updates have been made with respect to reporting on the RPPR for 2005 pursuant to the requirements of the New Jersey W&CRTK Act, the New Jersey Pollution Prevention Act, and subsequent regulations.

General Information

No changes have been made for reporting year 2005.

Section A. General Facility Information

Changes made to Section A for the 2005 reporting year are as follows:

 Question #7 has been reinstated for response regarding the Biennial Hazardous Waste Report for reporting year 2005.

Section B. Facility-Level Substance-Specific Information

Changes applicable to Section B for the 2005 reporting year are as follows:

- The difference between input and output quantities in throughput reporting on the RPPR must not
 exceed 5%. The difference will be presented on the "Self Verification of Materials Accounting Data
 Worksheet" as found in the e-reporting system. Note that this rule was in effect for 2004, however,
 the edit check in electronic reporting was added for this year.
- Methyl Ethyl Ketone, CAS No 78-93-3 has been delisted by USEPA as published in the June 30, 2005 Federal Register.

Sections C and D - Pollution Prevention Progress Reports

No changes have been made for reporting year 2005.

Pollution Prevention Process-level Data Worksheet (P2-115)

No changes have been made for reporting year 2005.

A Workshop... Complying with the Pollution Prevention Act, April 5, 2006



The Office of Pollution Prevention and Right To Know will be conducting a regulatory compliance and reporting workshop for regulated employers and consultants. The workshop will:

- Demonstrate how to prepare a P2 Plan
- Highlight Rule Changes of the 2005 W&CRTK and P2 Rule Readoptions
- Show you how to prepare and electronically submit an RPPR and a P2 Plan Summary
- Assess the results of P2 Planning
- Provide information about pollution prevention assistance programs, and
- Showcase P2 success stories as presented by industry professionals

Complying with the Pollution Prevention Act is scheduled for Wednesday, April 5, 2006 at Rutgers. If you plan to attend the workshop, please register online through the link on our website http://www.state.nj.us/dep/opppc/.

INSTRUCTIONS AND REFERENCE GUIDE FOR THE 2005 RELEASE AND POLLUTION PREVENTION REPORT

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INSTRUCTIONS FOR COMPLETING THE RELEASE AND POLLUTION PREVENTION REPORT (RPPR) FOR 2005

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY! If after reading the instructions you have any questions regarding this Report, please call the Office of Pollution Prevention and Right To Know (the Office) at (609) 777-0518.

I. INTRODUCTION

A. General Information

Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA - also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 [SARA] [P.L. 99-499]) requires all manufacturing sector facilities (those within Standard Industrial Classification [SIC] codes 20 through 39) and select non-manufacturing sector facilities to complete the Toxic Chemical Release Inventory (TRI) Reporting Form (Form R), if certain manufacturing, processing, or otherwise use activity thresholds are met. Activity definitions are provided in the instructions on pages 10 through 12 and in the RPPR Appendix A found online at http://www.state.nj.us/dep/opppc/figdoc.htm.

The New Jersey Release and Pollution Prevention Report (RPPR) is required by the DEP pursuant to the NJ Worker and Community Right to Know Act (P.L. 1983, c.315, N.J.S.A. 34:5A-1.1 et seq.), the NJ Pollution Prevention Act (P.L. 1991, c.235, N.J.S.A. 13:1D-35 et seq.), and the regulations adopted pursuant to these state laws for any "...employer who is subject to the reporting requirements of SARA Title III Section 313...". These are facilities that are required to submit a TRI Form R or Form A. The Form A is the "Certification Statement" that may be submitted for Form R substances that otherwise meet additional reporting criteria. (See Section I.F., The Toxic Chemical Release Inventory Alternate Threshold, found on page 3 of these instructions.) The RPPR consists of five parts for reporting year 2005: Sections A, B, C, and D and the Pollution Prevention Process-level Data Worksheet (P2-115).

B. The NJ Release and Pollution Prevention Report (RPPR)

Pursuant to N.J.A.C. 7:1G & 1K et seq., submission of an electronic Release and Pollution Prevention Report (eRPPR) is mandatory effective Reporting Year 2004, and thereafter. The portal to electronic reporting is found at http://www.njdeponline.com.

In conjunction with the mandatory requirement to submit an electronic RPPR via the Internet, these instructions have been streamlined and much of the additional contents of the appendices will be found online at http://www.state.nj.us/dep/opppc/figdoc.htm. You will find a "sample" copy of the RPPR form and all former appendices that were integral to the instructions book, including substance lists, County Lead Agencies, and pollution prevention methods at this website. If you need assistance, do not hesitate to call the Office at (609) 777-0518.

Information to be provided in Section A pertains to the facility site and its overall operations. Only one Section A is prepared and submitted for each reporting facility. Section B consists of questions concerning chemical throughput, environmental release and off-site transfer data, on-site waste management activities, as well as some general pollution prevention activity data, about each specific reportable substance subject to the RPPR reporting requirements. One RPPR Section B form must be completed for each reportable substance that was manufactured, processed, or otherwise used in excess of 10,000 pounds or the lower PBT threshold. Section C focuses on facility-level pollution prevention progress about each specific reportable substance subject to the pollution prevention reporting requirements. Section D focuses on pollution prevention progress for substances within targeted

processes or targeted grouped processes identified in a facility's Pollution Prevention Plan. The Pollution Prevention Process-level Data Worksheet (P2-115) is a spreadsheet that addresses the substance USE and NPO data elements for a five-year P2 planning cycle. The DEP encourages submission of the P2-115 worksheet for each reportable substance in place of Sections C and D for that substance. Note: Even if the P2-115 worksheets are not submitted, they must be updated and contained in the facility's P2 Plan.

C. Electronic Reporting Hardship Exemption

If it is a hardship for an employer to submit an RPPR using the Internet, an employer may request approval from the Department to submit the RPPR in paper form (N.J.A.C. 7:1G-5.3(b)). The Department shall approve, on a case-by-case basis, such a request provided that:

- 1. The request is submitted no later than March 1 of the submittal year;
- 2. The employer explains:
 - i. The grounds for the hardship that electronic submittal would impose; and
 - ii. The effort(s) the employer will make to ensure the facility's ability to make electronic submittals in the future; and
- 3. The employer makes every effort to become able to submit the form electronically in future years.

The Department shall approve, on a case-by-case basis, an extension of a reporting deadline if a facility is unable to electronically file its RPPR due to a malfunction in the Department's electronic reporting system. The Department shall not approve any extension due to a malfunction in a facility's electronic information technology system, unless the facility verifies the malfunction in writing and promptly files the report by other means.

D. Who Must Submit the RPPR?

"An employer who is subject to the reporting requirements of SARA Title III Section 313, or other criteria established by the Department in accordance with the Administrative Procedures Act, shall submit to the Department a Release and Pollution Prevention Report by July 1 of the year following the reporting year." (N.J.A.C. 7:1G-4.1(a)) If the federal TRI reporting thresholds are not exceeded and, therefore, no TRI form submission is required of the employer, complete only questions 1 and 5 and certify and submit Section A of the eRPPR using the reporting module found at http://www.njdeponline.com.

Pursuant to the Pollution Prevention regulations (N.J.A.C. 7:1K-3.10(d)), if a facility or a substance in a process is no longer subject to the reporting requirements, the owner or operator shall notify the department in writing by July 1 of the year following the change in status. The notification shall include the reason for the change. Send the notification to the address listed on page 32.

Submission of a completed RPPR by July 1, 2006 is mandatory. Failure to submit the RPPR may result in compliance actions against the company. It is a requirement to complete and submit the electronic RPPR to the DEP and to send a paper copy to the County Lead Agency (see the P2&RTK website at http://www.state.nj.us/dep/opppc/figdoc.htm). In addition, a file of all Community Right To Know (CRTK) Surveys and RPPRs must be maintained and the employer must make the CRTK Surveys and RPPRs available to employees and state inspectors or their local designees upon request (N.J.A.C. 7:1G-5.1(d) and (e)).

E. Notes on Completing the RPPR

A listed reportable substance must be considered when making threshold determinations and chemical throughput, environmental release, off-site transfer and waste management calculations if it was present in a mixture at a concentration above a specified de minimis level. The de minimis level is 1.0% for non-carcinogens, or 0.1% if the substance meets the OSHA carcinogen standards. See RPPR Appendices B and C online for the de minimis value associated with each listed reportable substance. The de minimis exemption does not apply to the "manufacture" of a substance except if that substance is "manufactured" as an impurity and remains in the product distributed in commerce, or if the substance is "imported" below the applicable de minimis level. The de minimis exemption does not apply to a byproduct "manufactured" coincidentally as a result of "manufacturing," "processing," "otherwise use," or any waste management activities. The de minimis exemption does not apply to the persistent, bioaccumulative and toxic (PBT) substances.

Complete all sections of the RPPR as they pertain to the facility or plant site. If a question does not apply to the operations, check the appropriate "N/A" box when available or enter "N/A" for "not applicable" on the form.

It is intended that existing or readily available data be used to complete the RPPR. Where quantities can be determined from existing records (e.g., inventory or production figures) or test results are available, actual figures are to be reported. Otherwise, best estimates may be given. Use engineering estimates and computations, process material balance studies, field tests or measurements made by the facility, or other technically sound practices.

While the USEPA requires no more than two significant integers when reporting releases and off-site transfers on the Form R, this practice is not encouraged on the RPPR. The DEP encourages the reporting of any estimated quantity to the nearest full pound as calculated or estimated. The mass balance approach of the RPPR provides for the analysis of materials accounting procedures, and the assessment of data quality and discrepancies in the materials accounting process. These analyses are conducted by DEP with the knowledge that some quantities are the best available estimates of the "true" value. Therefore, it is important that documentation of calculation methods be retained.

If the formulation of trade name chemicals used in the facility operations are not known, inquiries of the supplier or the manufacturer should be made to ascertain whether the mixture contains any reportable substances. Employers that report under EPCRA Section 313 and New Jersey Community Right to Know must know the chemical composition of the products used in order to accurately make threshold determinations and to calculate use, releases, off-site transfers, etc. Therefore, USEPA requires suppliers of mixtures or trade name products containing one or more of the Section 313 listed chemicals to notify their customers of the presence of those chemicals (supplier notification rule).

When information needed to complete a section is not readily available, make a reasonable effort to acquire the information. If it is still not possible to obtain the necessary information after a reasonable effort is conducted, submit a written explanation to the Office of Pollution Prevention and Right To Know at the address listed on page 32 describing the nature of the operations involved and the reasons for not supplying the data. Be sure to identify the facility by including the CRTK facility ID number, the facility name and physical location, and the substance or substances to which the explanation applies.

F. The Toxic Chemical Release Inventory Alternate Threshold

On November 30, 1994, USEPA adopted a rule (59 FR 61488) that established an alternate threshold under Section 313 of EPCRA (the Toxic Chemical Release Inventory) for those facilities with "low annual reportable amounts" of a listed toxic chemical. A facility that meets the current Section 313 reporting thresholds, but estimates that the total annual reportable amount (i.e., Form R, Section 8.1 through 8.7,

Column B) of the chemical does not exceed 500 pounds per year, can take advantage of an alternate TRI (manufacture, process, or otherwise use) threshold of one million pounds per year, for that chemical. The total annual reportable amount is also known as "total production-related waste" or, as DEP calls it, "total nonproduct output" (NPO). (You can refer to page 16, question #11 of these instructions for a definition of total nonproduct output.) A facility that meets the federal TRI alternate threshold reporting criteria for any chemical may submit the *Toxic Chemical Release Inventory Form A* in lieu of a full Form R. For further information on the USEPA alternate threshold, contact the EPCRA Hotline at 1(800) 424-9346. The TDD number is 1(800) 553-7672.

➢ Important Note: New Jersey's applicable laws and regulations have no counterpart to accommodate the provisions of the federal alternate (low release) threshold for the purposes of the RPPR. Therefore, if you are a TRI-covered facility, that is, if you submit one or more TRI Form R or Form A to the USEPA for 2005, then you must complete a Section B of this RPPR for each substance listed in RPPR Appendices B and C (found online) that was manufactured, processed or otherwise used in excess of 10,000 pounds or the lower PBT threshold in 2005.

In years prior to 2004, it had been the policy of the Department to exempt Form-A-only facilities from the reporting requirements of the RPPR. However, analyses of RPPR data in recent years have shown that facilities with less than 500 pounds of total production-related waste may still be using large quantities of toxic and hazardous substances that are being shipped as (or in) products and, therefore, may have opportunities to implement pollution prevention activities. Consequently, the Department has rescinded the policy of exempting Form-A-only facilities from the reporting requirements of the RPPR and requires the submission of the RPPR Sections A and B for reporting year 2004 and thereafter. Further, P2 planning is expected to apply to facilities that meet certain reporting criteria.

G. Reporting of Persistent, Bioaccumulative and Toxic (PBT) Chemicals

On October 29, 1999, the USEPA published a final rule (64 Federal Register 58666) under Section 313 of the EPCRA, which lowered the EPCRA Section 313 TRI thresholds for certain persistent, bioaccumulative and toxic (PBT) chemicals and added certain other PBT chemicals to the EPCRA Section 313 list of toxic chemicals effective reporting year 2000. The rule also included modifications to certain reporting exemptions and requirements for the chemicals now subject to the lower reporting thresholds. Further, on January 17, 2001, the USEPA published a final rule (66 FR 4500) that classified Lead and Lead Compounds as PBT chemicals and lowered the previously existing 25,000 pound and 10,000 pound reporting thresholds for Lead and Lead Compounds to 100 pounds. These PBT chemicals are of particular concern not only because they are toxic but also because they remain in the environment for long periods of time, are not readily destroyed, and build up or accumulate in body tissue. See RPPR Appendix B online for substance information, the entire list of PBT chemicals, and the lower reporting thresholds.

USEPA has eliminated the de minimis exemption for the PBT chemicals. Users of mixtures must use best readily available information to determine the PBT chemicals present and their concentrations. USEPA has also excluded all PBT chemicals from eligibility for the alternate threshold of one (1) million pounds for reporting on Form A and eliminated range reporting on the Form R for on-site releases and off-site transfers for further waste management for the PBT chemicals affected by these rules.

Pursuant to the NJ Worker and Community Right to Know Regulations (N.J.A.C. 7:1G-1.1 et seq.), the PBT chemicals are to be reported on Section B of the 2005 RPPR using the lower TRI thresholds as well. For the PBTs, and only the PBTs, you may report fractions of a pound using a decimal place and applying the USEPA guidance on data accuracy and precision. Report chemical throughput, releases and other waste management activities at a level of precision supported by the data and estimation techniques used. For PBT chemicals, 0.1 pound is the smallest amount required to be reported (except

for "Dioxin and Dioxin-like Compounds"). Throughput, environmental release and other waste management estimates ≤ 0.05 pounds can be rounded down to 0 pound. Note: for "Dioxin and Dioxin-like Compounds" the unit of measurement is grams or fractions of a gram (and not pounds even though the RPPR form may state "pounds" for the various quantitative fields). For "Dioxin and Dioxin-like Compounds," 100 micrograms (equals 0.0001 gram) is the smallest amount required to be reported. It is also the smallest amount that can be reported on the eRPPR (the eRPPR allows up to four places to the right of the decimal for all PBTs). Throughput, release and other waste management estimates ≤ 50 micrograms (equals 0.00005 gram) may be rounded to 0 grams. While the above text indicates the smallest amount required to be reported, if estimation techniques allow for the reporting of smaller quantities, you may do so within the limitations of the reporting software. Data precision and the quantities reported are dependent upon the accuracy and quality of the data and the estimation techniques used.

H. How to Prepare a Voluntary Revision of a Previous RPPR Submission

Revisions (voluntary or otherwise) to the RPPR may impact data reported on the Toxic Chemical Release Inventory (TRI) Reporting Form (Form R) and vice versa. It is important to exercise due diligence in the preparation, revision and submission of both forms.

Should you find that a revision to the RPPR is necessary, the following procedure is to be followed for reports that were previously submitted as a *paper* version:

- > make a copy of the original submission (only the page or pages that need to be revised);
- > cross out the incorrect information in red ink;
- enter the corrected information in red ink (in a space to the right, left, above or below the original entry as space permits);
- indicate "Revision" at the top of each page submitted, making certain that the New Jersey CRTK facility identification number (11 digits) and substance name and CAS number are clearly noted on each page; and
- submit to the DEP Office of Pollution Prevention and Right To Know at the address listed on page 32 and copies of the same to your County Lead Agency.

Should you find that an addendum to the RPPR is necessary (i.e., add a substance for a past reporting year that was not previously reported and the original submission was on *paper*), the following procedure is to be followed:

- > make a copy of a blank Section B if you don't have one, you should contact the Office for one;
- > enter the complete information for the substance;
- indicate "Addendum" at the top of each page, making certain that the reporting year, the New Jersey CRTK facility identification number (11 digits) and substance name and CAS number are clearly noted on each page; and
- submit to the DEP Office of Pollution Prevention and Right To Know and to your County Lead Agency.

Effective reporting year 2000, revisions and addenda to the RPPR may be completed in electronic format for any submission, current or prior (i.e., 2005, 2004, 2003, 2002, 2001 or 2000), that was made electronically. Simply go to http://www.njdeponline.com, open up the RPPR for the appropriate report year and make the necessary revisions and/or addendum. Then re-certify and submit the revised document. If you have any questions regarding the above procedures, please call the Office of Pollution Prevention and Right To Know at (609) 777-0518.

II. INSTRUCTIONS FOR COMPLETING SECTIONS A & B OF THE RPPR

It is mandatory to complete and submit the Release and Pollution Prevention Report (RPPR) using the DEP Electronic Data Transfer Web Site. This is accessed at http://www.njdeponline.com (see page *i* of these instructions). If you are approved for the hardship exemption and will submit a paper version of the RPPR, be sure to 1) contact the Office of Pollution Prevention and Right To Know for an original version of the form, 2) type or print legibly all responses on the RPPR, and 3) submit to the DEP the original, signed copy of the RPPR.

A. Section A. General Facility Information

Section A of the RPPR must be completed, certified, and submitted whether or not your facility is also submitting one or more Sections B, C, D or P2-115 forms.

The number designations of these instructions correspond to those on the RPPR unless otherwise indicated.

Questions 1 through 10:

1. Person to contact regarding this report - Enter the full name of the person who may be contacted for clarification of the information submitted in this report.

Title - Enter the title of the contact person in this field.

Phone number - Enter the telephone number (including the area code) for the contact person identified here. Enter the 10 digits only; do not use punctuation (e.g. hyphens, parentheses, spaces, etc.).

Fax # - Enter the fax number (including the area code) for the contact person. Enter the 10 digits only; do not use punctuation (e.g. hyphens, parentheses, spaces, etc.).

Contact's address - Enter the full mailing address (including street and/or box number, city, state, and zip code) for the contact person, if different from the facility mailing address.

- 2. Nature of business Briefly describe the nature of the business activity conducted at the reporting facility.
- 3. TRI Facility ID Number If a federal Form R or Form A has been submitted for a previous reporting year, the U.S. Environmental Protection Agency (USEPA) has assigned a TRI Facility Identification Number to the facility. Enter "New Facility" in this space if this is your first submission. Otherwise, call this Office for the TRI Facility ID Number if the number is not known.
- 4. NJ RTK Research & Development Laboratory exemption approval number If this facility has an approved NJ RTK Research & Development Laboratory exemption pursuant to N.J.A.C. 7:1G, it will be pre-populated here. If an exemption applies but the number does not show up here, call the Office at (609) 777-0518.
- 5. USEPA TRI Forms Indicate whether this facility is subject to filing with the USEPA one or more Toxic Chemical Release Inventory (TRI) Reporting Forms (Form R or Form A) for calendar year 2005.

Indicate the number of TRI Form R submitted pursuant to the reporting requirements for reporting year 2005.

Indicate the number of TRI Form A (Alternate Threshold form) submitted pursuant to the reporting requirements for reporting year 2005.

- 6. 2005 Waste Generation and Management Form (Form GM) Indicate whether this facility is subject to filing with the DEP a Waste Generation and Management Form (Form GM) for calendar year 2005. (This form is part of the 2005 Hazardous Waste Generator Biennial Report. The Biennial Report is due in an even year for the previous odd year and, therefore, is applicable to reporting year 2005.)
- 7. Wastewater Discharges Employers are reminded that these questions pertain to overall processes at the facility, <u>not</u> to the individual reportable substances.

If there is a discharge of a reported substance to a publicly owned treatment works (POTW), provide the name and physical address for the POTW plant to which the facility discharged wastewater containing reportable substances in 2005, if applicable. (This is the same information as entered on the 2005 Form R, Part II, Section 6.1.) Estimate the average daily volume of wastewater discharged in gallons per day. Briefly describe pretreatment methods, if any, prior to discharge.

If there is a discharge of a reported substance to a surface water, a navigable waterway, or to a tributary system, provide the name of the receiving stream(s) to which your facility discharged wastewater containing reportable substances, if applicable. (This is the same information as entered on the 2005 Form R, Part II, Section 5.3.) Estimate the average daily volume of wastewater discharged in gallons per day. Briefly describe pretreatment methods, if any, prior to discharge.

If there is a discharge of a reported substance to groundwater, estimate the average daily volume of wastewater containing reportable substances discharged to groundwater in gallons per day in 2005, if applicable. Briefly describe pretreatment methods, if any, prior to discharge.

 Trade Secret Claims - If a facility owner or operator wishes to file a trade secret claim for information required on the RPPR, obtain the "<u>Trade Secret Claim Instructions (DEQ-119)</u>" from the Office's website at http://www.state.nj.us/dep/opppc/forms/tradeclaim.pdf or call the Office at (609) 777-0518. All trade secret claims will require full documentation unless otherwise specified in the "Trade Secret Claim Instructions."

By using the eRPPR electronic reporting module, only the "public files" version may be completed online. A "confidential" version must be submitted on paper. All trade secret documentation must be attached to the RPPR and both must be submitted to the Department by July 1, 2006. If documentation for a trade secret claim was provided in a previous year, please specify this information with the submittal. The "confidential" version is to be completed by printing out a hardcopy from the online Internet program. While in the RPPR and P2 Plan Summary Folder, click on the printer icon found to the left of the document to be printed. Select the "Print All" button, which will format the document so that you can print it. Then fill in the confidential data on the printed version and follow the Trade Secret Claim instructions carefully. Under the New Jersey Worker and Community Right To Know Act and regulations, information concerning the generation, treatment, or destruction of nonproduct output including, but not limited to, environmental releases, on-site waste management and off-site transfers of reportable substances may not be claimed as a trade secret. A trade secret claim will be voided if the procedures are not observed.

Indicate whether this RPPR contains trade secret claims for any information provided within any Section B of this report by selecting "Yes" or "No."

Indicate whether this RPPR contains trade secret claims for any information provided within any Section C or D of this report by selecting "Yes" or "No."

- 9. Waste Hauler Information Provide the full name(s) and location(s) including street, city, state and zip code (not P.O. boxes) <u>and</u> the USEPA ID#, if applicable, <u>or</u> Solid Waste Transporter Registration Identification Number, of the hauler services that transported wastes containing the reported substances to off-site locations. (The Solid Waste Transporter Registration ID# is a five digit number assigned by DEP. If you only have a four digit number, add a zero to the beginning of the number, e.g., "1234" is entered as "01234.")
- 10. Certification of Employer or Duly Authorized Representative The certification statement will appear on the printed copy following electronic Certification and Submittal. The entire Report must be completed before certification and submittal can be accomplished. (See Section IV., Submitting This Report, page 32.)

B. Section B. Facility-Level Substance-Specific Information

Complete one Section B for each reportable substance that was manufactured, processed, or otherwise used in excess of 10,000 pounds or the PBT threshold, whichever is lower, in 2005.

B.1 Materials Accounting Discrepancy

The intrinsic value of data is found in the data quality. In recent years there has been a push to improve the quality of the RPPR throughput data. For reporting year 2002, the Department applied a 10% maximum allowable error to the electronic Internet reporting system for the difference between inputs and outputs in materials accounting. For reporting year 2004 and thereafter, a requirement (N.J.A.C. 7:1G-4.1(c)1) states "The difference between input and output quantities in throughput reporting on the Release and Pollution Prevention Report shall not exceed five percent." The electronic reporting system is programmed to allow up to 5% difference.

B.2 New Jersey Threshold of 10,000 Pounds

Pursuant to the reporting requirements established by the New Jersey Pollution Prevention Act and subsequent regulations, any facility that is required to complete one or more federal Toxic Chemical Release Inventory (TRI) Reporting Form (Form R and/or Form A) must complete a New Jersey Release and Pollution Prevention Report for all substances listed in RPPR Appendices B and C that exceeded the 10.000 pound threshold or the lower PBT threshold for manufacture, process, or otherwise use in 2005. Therefore, additional substances may be required to be reported on the RPPR that were not subject to reporting under the TRI. Remember that the thresholds for the Persistent, Bioaccumulative and Toxic (PBT) chemicals are lower than 10,000 pounds! Conversely, if the federal thresholds were not exceeded for any listed substance then only Section A (questions 1 and 5, and the certification statement) of this report must be completed and submitted by July 1, 2006. Once an activity (manufacture, process, or otherwise use) threshold is exceeded, the chemical throughput, environmental release, on-site management, off-site transfer, and pollution prevention data must be provided for all activities involving the reportable substance. Again (as noted on page 2), the Pollution Prevention regulations require a notification if a facility or a substance in a process is no longer subject to the reporting requirements. The owner or operator shall notify the department in writing by July 1 of the year following the change in status. The notification shall include the reason for the change. Send the notification to the address on page 32.

B.3 Threshold Determinations for and Reporting of Ammonia (anhydrous and aqueous)

On June 30, 1995 (60 FR 34182), USEPA issued a final rule that 1) modified the "Ammonia" reporting requirements (60 FR 34172), and 2) deleted ammonium sulfate (solution) and ammonium nitrate (solution) because these and other aqueous ammonium salts are addressed under the ammonia listing. The listing for ammonia now presents the modifier "includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is

reportable under this listing." The qualifier for ammonia means that anhydrous forms of ammonia are 100 percent reportable and aqueous forms are limited to 10 percent of total aqueous ammonia. Therefore, when determining threshold quantities, 100 percent of anhydrous ammonia is included but only 10 percent of total aqueous ammonia is included. If any ammonia evaporates from aqueous ammonia solutions, 100 percent of the evaporated ammonia is included in threshold determinations and materials accounting calculations. (See the USEPA's TRI guidance on reporting anhydrous ammonia and aqueous ammonia at http://www.epa.gov/tri/guide_docs/index.htm#chemical_sp. You will need Adobe Acrobat Reader 5 or greater in order to view the USEPA's guidance documents.)

With respect to this federal rule, the DEP, using available data, recognized that the rule and its accompanying modifications of the ammonia listing potentially had serious implications concerning materials accounting for this substance. For those facilities that manufacture, process and/or otherwise use both anhydrous and aqueous forms of ammonia and, therefore, must report environmental releases and/or off-site transfers of ammonia, there is a good probability that a balance in the materials accounting process will not be achieved based upon the reporting of 100% of anhydrous ammonia and 10% of total aqueous ammonia. For any questions about this matter or assistance, call the Office of Pollution Prevention and Right To Know at (609) 777-0518.

B.4 Threshold Determinations for and Reporting of Chemical Categories

A number of chemical compound categories are subject to reporting (see RPPR Appendix C online). When reporting for one of these chemical categories, all individual members of the category that are manufactured, processed, or otherwise used must be totaled and figured into the threshold determination. However, threshold determinations are to be made separately for each of the three defined activities (i.e., manufacture, process, and otherwise use).

Threshold determinations for metal-containing compounds present a special case. For example, if several different "Nickel Compounds" are processed, base the threshold determination on the total weight of all nickel compounds processed. However, if both the "parent" metal "Nickel" (CAS# 7440-02-0) as well as one or more nickel compounds are processed, then make individual threshold determinations for each because they are separately listed reportable substances. If the thresholds for both the parent metal and compounds of that same metal are exceeded, one combined report (e.g., one Section B for "Nickel Compounds" including nickel) may be filed because the inventory, throughput, environmental release, off-site transfer, and pollution prevention information reported in connection with metal compounds will be the total pounds of the parent metal only.

One other case involving metal compounds should be noted. Some metal compounds may contain more than one listed metal. For example, copper chromate is both a "Copper Compound" and a "Chromium Compound." In such cases, if the 10,000 pound activity threshold is exceeded, two separate Section B reports are required to be filed – in this case one for Copper Compounds and one for Chromium Compounds. Apply the total weight of the copper chromate to the threshold determination for both Copper Compounds and Chromium Compounds. If the threshold is exceeded for these categories, the amount of each parent metal (i.e., copper and chromium) would be reported for inventory, throughput, release, transfer, and pollution prevention activities (not the amount of the compound) on each separate Section B form.

B.5 Reporting of Substance-Related Information

The Facility-Level Substances Folder for the eRPPR lists the substances a facility has reported in the most recent year's RPPR. Electronic reporting from this point forward is set up to continually reference these substances, i.e., the substances in this folder become the default substances for completing the eRPPR. Add or delete substances as necessary from the list, or simply continue in the completion of

the Section B for the default list of substances. Sort the list of chemicals by CAS # or Substance Name. Depending on the choice, other relevant data fields will populate automatically.

Verify that all of the reportable substances appear in the Facility-Level Substances Folder. If they do not appear properly, add or delete substances as necessary. When all reportable substances are entered into the folder, it is recommended to select one substance at a time and click on "Modify Selection" to fill out the Section B data.

1. CAS Number (Category Number) and Substance Name (Category Name) are prepopulated from the Facility-Level Substances Folder.

(Remember- when reporting a compound category in Section B, complete the information for the chemical category only, <u>not</u> each individual substance in the category. As clarified below in #2, metals are to be quantified as the amount of the parent metal only.)

Substance-Specific Trade Secret Claim – Indicate whether any throughput data, Section B questions #5 through #10, have been claimed trade secret on this RPPR by checking "Yes" or "No." Note that questions #5.1 and #10.1 can not be claimed trade secret, as they have to do with nonproduct output. To make a valid claim, obtain and submit the "Trade Secret Claim Instructions (DEQ-119)" package (refer to these instructions under Section A, question #8 – page 7 - and then follow the trade secret claims instructions precisely). A trade secret claim will be voided if the procedures are not observed.

2. Activities and Uses of the Substance at the Facility - Indicate whether the substance is manufactured (including imported), processed, or otherwise used at the facility and the general nature of such activities and uses at the facility during the calendar year. Report activities that take place only at the facility, not activities that take place at other facilities involving this facility's products. Check all the blocks in this section that apply! The response to this question should be the same as entered on USEPA Form R, Part II, Sections 3.1 through 3.3. Refer to the definitions of "manufacture," "process," and "otherwise use" which follow and are also found in RPPR Appendix A online.

With respect to the activities and uses of metals and metal compounds, there is a necessary clarification regarding the reporting requirements of the RPPR. Any specific metal or metal compound may be "processed" (as a formulation component) to formulate another metal compound. Some metals (with qualifying conditions) may be "manufactured," while others may be "otherwise used." The appropriate activities should be indicated (checked) in questions #2.1, #2.2, and/or #2.3, and then the estimated amount of the parent metal only is to be reported for inventory, throughput, environmental release, off-site transfer, and pollution prevention activities. While a metal compound may be formulated by processing the parent metal or another metal compound, or a parent metal may be extracted by processing a metal compound, the "quantity produced on site" (question #6) is zero because the facility is not actually manufacturing the parent metal.

There is an <u>exception</u> in the case of Aluminum or Zinc with the "<u>fume or dust"</u> qualifier. For these two metals ("fume or dust" form), if they are manufactured, processed, or otherwise used in the qualified form, the appropriate activity threshold must be exceeded to initiate reporting. If "fume or dust" is manufactured, the quantity manufactured would then be reported in question #6.

Similarly, if "fume or dust" is consumed (reacted) in process, the quantity consumed would then be reported in question #8.

2.1 Manufacture the Substance - Persons who manufacture (including import) the reportable substance must check at least one:

Produce - The substance is produced at the facility.

Import - The substance is imported by the facility into the Customs Territory of the United States.

And check at least one:

For on-site use/processing - The substance is produced or imported and then further processed or otherwise used at the same facility. If you check this block, at least one item in #2.2 or #2.3 must also be checked.

For sale/distribution - The substance is produced or imported specifically for sale or distribution outside the manufacturing facility.

As a byproduct - The substance is produced coincidentally during the production, processing, otherwise use, or disposal of another substance or mixture and, following its production, is separated from that other chemical substance or mixture. Substances produced and released as a result of waste treatment or disposal are also considered byproducts.

As an impurity - The substance is produced coincidentally as a result of the manufacture, processing, or otherwise use of another substance, but is not separated and remains primarily in the mixture or product with that other substance.

2.2 Process the Substance (incorporative activities)

As a reactant - A natural or synthetic substance used in chemical reactions for the manufacture of another chemical substance or of a product. Examples include, but are not limited to, feedstocks, raw materials, intermediates, and initiators.

As a formulation component - A substance added to a product (or product mixture) prior to further distribution of the product that acts as a performance enhancer during use of the product. Examples of substances used in this capacity include, but are not limited to, additives, dyes, reaction diluents, initiators, solvents, inhibitors, emulsifiers, surfactants, lubricants, flame retardants, and rheological modifiers.

As an article component - A chemical substance that becomes an integral component of an article distributed for industrial, trade, or consumer use. One example is the pigment components of paint applied to a chair that is sold.

Repackaging - Processing or preparation of a substance (or product mixture) for distribution in commerce in a different form, state or quantity. This includes, but is not limited to, the transfer of material from a bulk container, such as a tank truck to smaller containers such as cans or bottles.

As an impurity – The substance is processed but is not separated and remains primarily in the mixture or other trade name product with that/those other chemical(s).

2.3 Otherwise Use the Substance (non-incorporative activities)

As a chemical processing aid - A substance that is added to a reaction mixture to aid in the manufacture or synthesis of another chemical substance but is not intended to remain in or become part of the product or product mixture. Examples of such substances include, but are not limited to, process solvents, catalysts, inhibitors, initiators, reaction terminators, and solution buffers.

As a manufacturing aid - A substance that aids the manufacturing process but does not become part of the resulting product and is not added to the reaction mixture during the manufacture or synthesis of another chemical substance. Examples include, but are not limited to, process lubricants, metalworking fluids, coolants, refrigerants, and hydraulic fluids.

Ancillary or other use - A substance in this category is used at a facility for purposes other than as a chemical processing aid or manufacturing aid as described above. Examples include, but are not limited to, cleaners, degreasers, lubricants, fuels, listed substances used for treating wastes, and listed substances used to treat water at the facility.

3. Principal Method of Storage – From the dropdown list select the predominant type of container in which the substance is stored on site at the facility. Refer to Table 1, following. Use code OT ("Other") when a container other than the ones listed is employed.

Table 1: Sto	orage Container Codes
BA – Bag BG – Bottle or jug (glass) BN – Tote bin BP – Bottle or jug (plastic) BT - Battery BX – Box CB – Carboy CN – Can CY – Cylinder DF – Fiber drum	DP – Plastic drum DS – Steel drum OT – Other (describe) RC – Rail car SI – Silo TA – Above ground tank TB – Below ground tank TI – Tank inside building TW – Tank wagon

Frequency of Transfer and Methods of Transfer - Enter the average frequency and the predominant method of transfer used at the facility for the reported substance.

Example: A. "3" times per "week" - "Pneumatic conveying"

B. "2" times per "month"

- "Pumping" (specify "submerged" or "splash fill")

C. "8" times per "day" - "Manual bag dumping"

<u>Note:</u> If the transfer operation is continuous, skip the "Frequency of Transfer from Storage" field and enter "contin" in the "Times Per" field. Further, enter more detail, e.g. "continuous pumping" in the "Methods of Transfer" field. Restrict the designation of the frequency of transfer to four (4) characters; for example, if the frequency is 10,000 times per year, divide by 12 to report "833 times per month" or divide by 52 to report "192 times per week." In other words, do not report more than "9999" Times Per "time period."

B.6 Inventory and Throughput Quantity Information

Report all quantities measured in pounds. The unit of measurement for these questions is "pounds" except for "Dioxin and Dioxin-like Compounds" where the unit of measurement is "grams." **Do not** attempt to use the USEPA TRI Form R range quantity or range code — enter an actual (estimated) quantity. **Do** round quantities up or down to the nearest pound. Do not report fractions of a pound unless the substance is a PBT. **Do not** include the units of measurement or other notations with the quantity, e.g., "M," "pounds," "lbs.," "kg."

For questions #4 through #22, report the data in estimated quantities of pounds for calendar year 2005. If a question does not apply to the operations, check the "N/A" box for "not applicable." Rounding off to two significant integers (as per Form R) is not recommended because of the impact that rounding has on materials accounting calculations.

For each estimate, indicate the principal method used to determine the amount of substance reported. From the dropdown list, select the basis of estimate that identifies the method that applies to the largest portion of the total estimated quantity.

For example, if 40 percent of stack air emissions of the reported substance was derived using monitoring data, 30 percent by mass balance, and 30 percent by emission factors, select "Monitoring" for the Basis of Estimate.

The basis of estimate codes are as follows:

- Estimate is based on <u>Monitoring data or Measurements for the substance; e.g., using invoice data or forms; weighing substances in inventory; or as released to the environment and/or transferred to an off-site facility.
 </u>
- C Estimate is based on mass balance <u>Calculations</u>, such as a calculation of the amount of the substance in streams entering and leaving process equipment; or calculating the unknown fugitive emissions using the Materials Accounting Worksheet (on page 21) knowing all other variables in the mass balance equation.
- E Estimate is based on published <u>E</u>mission factors, such as those relating release quantity to throughput or equipment type (e.g., air emission factors).
- O Estimate is based on Other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgement. This would include applying an estimated removal efficiency to a waste stream, even if the composition of the stream before treatment was fully identified through monitoring data.
- T The quantity is claimed as a "Trade Secret" under the provisions of the NJ Worker and Community Right To Know Act. Refer to Section B, #1 (page 10) for further details regarding a valid Trade Secret Claim. On the unsanitized ("confidential") version which will be a paper copy indicate both the actual basis of estimate (M, C, E or O) as well as "T" for trade secret.

If the monitoring data, mass balance or emission factor used to estimate the release is not specific to the substance being reported, the form should identify the estimate as based on engineering calculations or best engineering judgement (i.e., "Other" and not "Monitoring," "Calculations" or "Emissions").

If a mass balance calculation yields the flow rate of a waste stream, but the quantity of reported substance in the waste stream is based on solubility data, report "Other" because "engineering calculations" were used as the basis of estimate of the quantity of the substance in the waste stream.

If the concentration of the substance in the waste stream was measured by monitoring equipment and the flow rate of the waste stream was determined by mass balance, then the primary basis of estimate is "Monitoring." Even though a mass balance calculation also contributed to the estimate, "Monitoring" should be indicated because monitoring data were used to estimate the concentration of the waste stream.

Mass balance ("Calculations") should only be indicated if it is <u>directly</u> used to calculate the mass (weight) of the reported substance. Monitoring data ("Monitoring") should be indicated as the basis of estimate <u>only</u> if the chemical concentration is measured in the waste stream being released into the environment. Monitoring data should <u>not</u> be indicated, for example, if the monitoring data relates to a concentration of the substance in other process streams within the facility.

4. Maximum Daily Inventory of Substance - For the reported substance, estimate in pounds the greatest amount that was present at the facility on any single day during 2005. If the substance is part of a mixture, include the quantity of the substance contained in the mixture, not the total quantity of the mixture itself. For chemical categories (e.g., nickel compounds), include all chemical compounds in the category when calculating the maximum amount, using the entire weight of each compound. (This is the only case where the entire quantity of a compound is reported on the form.) The reported quantity for any substance or category should be covered by the two-digit range code entered on TRI Form R, Part II, Section 4.1.)

Example #1: At one time during $\underline{2005}$, the facility stored a maximum of 10,000 pounds of a mixture containing 10% by weight of toluene. Therefore, 1,000 pounds of toluene were on site. The answer to question 4 would be $\underline{1,000}$ pounds, not 10,000 pounds.

Example #2: At one time during 2005, the facility stored a maximum of 10,000 pounds of a nickel compound containing 40% by weight of nickel. Therefore, 4,000 pounds of nickel were on site. The answer to question 4 would be 10,000 pounds (the entire amount of the compound).

- 5. Starting Inventory of Substance Enter the total quantity of the substance already on site as of January 1, 2005 (or as close as possible to that date). The total quantity is to include, but not be limited to, the amount of the substance on site as raw material, as a mixture, as (or in) product, as (or in) intermediates, etc., and as (or in) waste that was generated in the prior year and was still on site at the beginning of the year. Note: The Starting Inventory for 2005 should be the same as the Ending Inventory for 2004.
- Ouantity of Starting Inventory that is Nonproduct Output (NPO) Report the total quantity of the substance on site at the beginning of calendar year 2005 (#5 above) that is nonproduct output.

 Note: The Starting Inventory as NPO for 2005 should be the same as the Ending Inventory as NPO for 2004. (See question #11 for the definition of NPO.)
- 6. Quantity Produced on Site Enter the total quantity of the substance produced on site during calendar year <u>2005</u>. The total quantity should include, but not be limited to, both intentional and unintentional syntheses in a production process, isolated intermediates, and quantities generated as NPO (waste), by-products, or impurities. The quantity produced as a transient intermediate, intentional or unintentional, is to be included.

In the case of metals and metal compounds, there is a distinction to be made between the activity definition for "manufacture" and the materials accounting data element of "produced" (see Section B, questions #2.1 vs. #6). Only "Aluminum (fume or dust)" and "Zinc (fume or dust)" may be reported as produced on site. These two forms of the two metals may be produced from metal ingots, chips, solutions, etc. and, therefore, be reported under this question. Otherwise, in a process, a metal compound may be "manufactured" from either the parent metal or another metal compound. If a metal undergoes a change of valence, a metal compound is considered to be "manufactured." For example, during the combustion process copper in valence state zero changes to copper in valence state +2 in a compound such as copper (II) oxide (CuO). Furthermore, a metallic compound could be transformed to another metallic compound without a change in valence state (e.g., copper (II) chloride (CuCl₂) is transformed to copper (II) oxide). The transformation to a new compound without a change in valence state is also considered to be "manufactured" for purposes of this reporting requirement. Any metal or metal compound used to "manufacture" another metal compound is reported as "quantity brought on site" (question #7) and the parent metal only is quantified. In the case of a metal or metal compound used to "manufacture" another metal compound, under 2.1, you would check produce and at least one of the boxes to the right (for on-site use/processing, for sale/distribution, as a byproduct, or as an impurity), and then any of 2.2 and/or 2.3, as appropriate, for the purposes of question #2.

- 7. Quantity Brought on Site Enter the total quantity of the substance brought into the facility from all off-site suppliers, including other facility locations and divisions of the company, during calendar year 2005. The total quantity should include, but not be limited to, substances used as a raw material, a chemical processing aid, a manufacturing aid, or an ancillary material; quantities brought on site as mixtures; quantities brought on site as recycled substance; and quantities brought on site as (or in) waste.
- 7.1 Quantity of #7 that is Brought on Site as Recycled Substance Enter the total quantity of the substance brought into the facility (#7 above) as recycled substance from all off-site suppliers, including other facility locations and divisions of the company, during calendar year 2005.
- 8. Quantity Consumed on Site Enter the total quantity of the substance consumed in production processes during the reporting year. A substance is consumed if its molecular structure is altered, i.e., the substance is reacted and no longer exists in its original chemical form. Quantities of the substance used in a production process that are not chemically reacted are not to be included here.

<u>When reporting a metal</u>, whether as the element or as a component of a metal compound (category), the metal should not be reported as "Consumed on Site" (unless aluminum or zinc in a fume or dust form, e.g., powder, is manufactured, processed or otherwise used). The mass of the parent metal can not be chemically altered. Metals usually occur in the form of compounds that must be physically or chemically processed to yield the pure metal. The metal may change valence states, the compound in which the metal is contained may be consumed, a new metal compound may be formulated, but the metal itself is not consumed. Remember, when reporting metals as a component of a compound, only the amount of the parent metal is quantified in each appropriate reporting field.

Example #1: A facility manufactured nitrobenzene by nitrating benzene with a nitric acid-sulfuric acid mixture. Benzene was "consumed" in the production process because it experienced a chemical change and ceased to exist as benzene.

On the other hand, quantities of selected substances that are incorporated in a process but <u>not</u> chemically transformed should <u>not</u> be listed as "consumed."

Example #2: A facility used trichloroethylene (TCE) as a degreasing agent for cleaning metal. Some of the substance evaporated from the process, and the rest became too contaminated for reuse. The quantities are entered as "Air Emissions" (#15 and/or #16) and "Transfers to Other Off-Site Locations" (#21), respectively, not under "Quantity Consumed" (#8).

Example #3: An electroplating facility used metal cyanide compounds in their electroplating operations. More than 25,000 pounds of the metal cyanide compound were processed. The parent metal from the metal cyanide compound was electrochemically plated onto a substrate, leaving the cyanide as a waste product. The parent metal was "processed" while the cyanide compound was "otherwise used." The quantities of the parent metal, reported as "metal compound," are reported as "shipped off site as (or in) product" (#9), "ending inventory" (#10), if appropriate, and any applicable environmental releases, on-site management practices, or off-site transfers. The quantities of the "cyanide compound" are reported as "ending inventory" (#10), if appropriate, "Transfers to Other Off-Site Locations" (#21), and any other appropriate activities.

- 9. Quantity Shipped off Site as (or in) Product Enter the total quantity of the substance shipped off the facility site during calendar year 2005 in a form suitable for final use, as intermediates subject to further processing leading to final use, or even shipped in its "raw" form as found in inventory. Include quantities shipped to other facility locations and divisions of your own company. Also include quantities shipped to locations such as off-site warehouses, vendors, etc. Again, enter the quantity of the substance only, not the total quantity of the mixture within which it is a component. Do not include quantities being shipped off site for recycling, energy recovery, waste treatment, or disposal under this question. These should be reported under question #21. Quantities of the substance that were chemically altered or reacted during processing should be reported under question #8 and not here.
- 10. Ending Inventory Enter the total quantity of the substance remaining on site at the end of calendar year 2005. The total quantity is to include, but not be limited to, the amount of the substance on site as raw material, as a mixture, as (or in) product, as (or in) intermediates, etc., and as (or in) waste that was generated and was still on site at the end of the year.
- 10.1 Quantity of Ending Inventory that is Nonproduct Output (NPO) Enter the total quantity of the substance remaining on site at the end of calendar year 2005 (#10 above) that is nonproduct output. (See next question, #11, for definition of NPO.)
- 11. Total Nonproduct Output (NPO) This quantity is calculated by the eRPPR reporting software, equal to the total nonproduct output for the substance for all waste streams generated in the reporting year. NPO will be calculated using the following equation:
 - NPO = (12) Quantity Recycled Out-of-Process on Site and Used on Site + (13) Quantity Destroyed through On-Site Treatment + (14) Quantity Destroyed through On-Site Energy Recovery + (15) Stack Air Emissions + (16) Fugitive Air Emissions + (17) Total Displaying to POTM + (18) Total Displaying to Surface Western +
 - (17) Total Discharge to POTW + (18) Total Discharge to Surface Waters +
 - (19) Total Discharge to Groundwater + (20) On-Site Land Disposal +
 - (21) Transfers to Other Off-Site Locations + (10.1) Quantity of Ending Inventory that is NPO (5.1) Quantity of Beginning Inventory that is NPO
- 12. Quantity Recycled Out-of-Process on Site and Used on Site Enter the quantity of the substance that was recycled out-of-process on site and then processed or otherwise used again at the facility during calendar year 2005. (DO NOT include recycling that occurs in-process!) This question

refers to the method of minimizing the amount of waste to be otherwise managed or disposed by reclaiming reusable materials by the removal of contaminants from the substance to allow it to be used again. Quantities recycled but not used again on site should be reported as one, or more, of the following: 1) an environmental release; 2) an off-site transfer; 3) a product (as co-product) shipped off site; 4) other on-site waste management activity, or 5) part of the year-end inventory.

- 13. Quantity Destroyed through On-Site Treatment Enter the total quantity of the substance that was destroyed or neutralized through on-site treatment processes. The total quantity is to include, but not be limited to, that which was destroyed in all waste streams at the facility, i.e., gaseous, wastewater (aqueous), liquid (non-aqueous), and solid waste streams. For the purposes of this question, destroyed includes any method, technique or process, designed to change the physical, chemical, or biological character or composition of the substance so as to neutralize such wastes, or to chemically decompose the waste. (The quantity should be the same as entered on Form R, Part II, Section 8.6, Column B.)
- 14. Quantity Destroyed through On-Site Energy Recovery Enter the total quantity of the substance that was destroyed through an on-site energy recovery process. For the purposes of reporting on the RPPR, reportable on-site energy recovery is the combustion of a residual material containing a reported substance as nonproduct output when: a) the combustion unit is integrated into an energy recovery system (i.e., boilers, industrial furnaces, and industrial kilns); and b) the substance is combustible and has a heating value high enough to sustain combustion. Note: metals and metal compounds are not combustible and, therefore, are not to be reported as destroyed through on-site (or off-site) energy recovery. (The quantity should be the same as entered on Form R, Part II, Section 8.2, Column B.)

B.7 Environmental Releases and Off-Site Transfers

Both routine releases, such as stack air emissions, and accidental or non-routine releases, such as chemical spills or wastes generated from clean-up operations on site, must be included in the following questions (#15 through #21).

Air Emissions

- 15. Stack Emissions Enter the total quantity of stack emissions. These are emissions that were released into the atmosphere from a readily-identifiable point source. This definition is intended to include emissions from stacks, exhaust vents, ducts, pipes, or other confined air streams, and storage tanks. (The quantity should be the same as entered on Form R, Part II, Section 5.2.)
- 16. Fugitive Emissions Enter the total quantity of fugitive emissions. These are emissions that were not released through stacks, vents, ducts, pipes or any other confined air stream. Included are emissions, evaporation, leakage, or releases from the following sources: blending operations; transfer operations; charging and discharging reaction vessels; storage piles; leaking seals, pumps, flanges, valves, etc.; furnaces or kilns; open vats or pits; crushing, pelletizing or grinding operations; and, loading and unloading operations. (The quantity should be the same as entered on Form R, Part II, Section 5.1.)

Wastewater Discharges

Questions #17 through #19 address wastewater discharges to publicly owned treatment works (POTWs), to surface waters, and to groundwaters. These questions are only concerned with the quantity of the reported substance that was discharged, not with the volume of the effluent that contained the substance. Thus, if in 2005 a discharge of a million gallons of effluent contained 500 pounds of the reported substance, enter "500."

- 17. Total Discharge to Publicly Owned Treatment Works (POTW) Enter the total quantity of the substance discharged into a municipal sewer system or one owned by a municipal utilities authority, sewerage authority, or regional utilities authority. (The quantity should be the same as entered on Form R, Part II, Section 6.1.)
- 18. Total Discharge to Surface Waters Enter the total quantity of the substance discharged directly into surface waters, other than quantities which went to surface waters via a POTW (#17). (The quantity should be the same as entered on Form R, Part II, Section 5.3.)
- 19. Total Discharge to Groundwater Enter the total quantity of the substance discharged into groundwater from the facility. Discharges onto land, such as spray irrigation, discharges to infiltration basins, and discharges to subsurface systems should be reported under this question as groundwater discharges.

On-Site Land Disposal

20. On-Site Land Disposal - On-site land disposal includes, but is not limited to: 1) surface impoundments; 2) on-site landfills; and 3) land treatment (land spreading), including other activities, such as incorporating wastes into soil for treatment within the boundaries of the reporting facility. While item "3" is considered a release to land, any volatilization of a reported substance into the air occurring during the disposal operation must be included in the total fugitive air emissions reported in question #16. Question #20 is organized in tabular form. This question provides for any number of separate entries if different management or disposal methods were applicable to quantities of the reported substance. (See Table 3 on page 19 for a complete listing of applicable management method codes.)

In the first column, select the appropriate code or codes from the dropdown list for the on-site storage method prior to land disposal within the boundaries of the reporting facility.

In the second column, enter the total quantity (in pounds) of NPO (or waste material) disposed on site that contained the reported substance.

In the third column, enter the quantity (in pounds) of the reported substance contained in the disposed NPO. (The sum of the quantities entered here should be the same as the sum of the quantities as entered on Form R, Part II, Section 5.5.1 through 5.5.4.)

In the fourth column, select the appropriate basis of estimate for the quantity of the reported substance that was disposed (or managed) on site.

In the fifth column, select the appropriate management or disposal method from the dropdown list to indicate the method or methods by which the reported substance was managed or disposed on site.

Other Off-Site Transfers

21. Transfers to Other Off-Site Locations - In this section provide information as to how NPO containing the reported substance was managed or disposed at other off-site locations. *Do not report POTW discharges here!!* Off-site transfers include transfers to other locations for recycling, energy recovery, treatment, or disposal. Question #21 is organized in tabular form. This question provides space for multiple entries to separate off-site locations. Each off-site location provides space for three (3) entries if different management or disposal methods were applicable to quantities of the reported substance transferred to the identified location.

In the first column, enter the name and physical location, including the street, city, state and zip code <u>and</u> the USEPA ID#, if appropriate, of each final disposal site or off-site management facility to which NPO containing the reported substance was sent, directly or through a hauler. Do not list a transfer facility or brokerage facility as the final treatment or disposal facility, unless the final disposal site is not known.

In the second column, select the appropriate code or codes from the dropdown list for the on-site storage method. (This entry should represent the method by which the selected substance was stored on site as NPO prior to the off-site transfer.)

In the third column, enter the total quantity (in pounds) of transferred NPO (or waste material) that contained the reported substance.

In the fourth column, enter the quantity (in pounds) of the reported substance contained in the transferred NPO. (The quantities entered here should be the same as entered on Form R, Part II, Section 6.2.)

In the fifth column, select the appropriate basis of estimate for the quantity of the reported substance that was transferred off site.

In the sixth column, select the appropriate management or disposal method from the dropdown list to indicate the method or methods by which the reported substance was managed or disposed off site.

	Table 2: Nonproduct Output (NPO) S	torage Method	
SM-01 Drums	SM-04 Drying Bed	SM-07 Carboy	
SM-02 Bulk Tanks	SM-05 Lagoon (lined)	SM-08 Rail car	
SM-03 Dumpster	SM-06 Lagoon (unlined)	SM-09 Other	

	Table 3: Nonproduct Outp	ut (NPC)) Management Method
Deerel		Dispos	al
Recycl		D10	Storage Only
D20	Solvents/Organics Recovery	D41	Solidification/Stabilization - metals &
D24	Metals Recovery	D 4 1	metal category compounds only
D26	Other Reuse or Recovery	Dea	
D28	Acid Regeneration	D62	Wastewater Treatment (excluding POTW) -
D93	Transfer to Waste Broker - Recycling	DC4	metals & metal category compounds only
		D64	Other Landfills
		D65	RCRA Subtitle C Landfills
Waste	<u>Treatment</u>	D66	RCRA Subtitle C Surface Impoundment
D40	Solidification/Stabilization	D67	Other Surface Impoundments
D50	Incineration/Thermal Treatment	D73	Land Treatment
D54	Incineration/Insignificant Fuel Value	D79	Other Land Disposal
D61	Wastewater Treatment (excluding POTW)	D81	Underground Injection to Class I Wells
D69	Other Waste Treatment	D82	Underground Injection to Class II-V Wells
D95	Transfer to Waste Broker	D90	Other Off-Site Management
	- Waste Treatment	D94	Transfer to Waste Broker - Disposal
		D99	Unknown
		Energy	/ Recovery
		D56	Energy Recovery
		D30	Transfer to Waste Broker
		D92	
			- Energy Recovery

B.8 Self Verification of Materials Accounting Data Worksheet

The sum of the reported starting inventory, quantity produced on site, quantity brought on site and quantity recycled out of process & re-used on site should approximately equal the sum of the reported quantity consumed (i.e., chemically reacted), quantity shipped off site as (or in) product, quantity shipped off site as (or in) NPO, quantity destroyed through on-site treatment, quantity destroyed through on-site energy recovery, quantity recycled out of process & re-used on site, total air emissions, total wastewater discharges, on-site land disposals, and ending inventory. (See the self verification worksheet on page 21 of these instructions.) The eRPPR will present the Self Verification of Materials Accounting Data Worksheet when "Continue" is selected at the end of Section B when Inputs do not exactly equal Outputs. It can also be accessed at any time by clicking on the "View Materials Accounting Worksheet" button at the end of Section B. Remember that the system will allow a difference of up to 5%.

- Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes In this section, enter the total quantity (in pounds) of the reported substance released directly into the environment or sent off site for recycling, energy recovery, treatment, or disposal during the reporting year due to any of the following events:
 - (1) remedial actions;
 - (2) catastrophic events such as earthquakes, fires, or floods; or
 - (3) one-time events not associated with normal or routine production processes.

(The quantity entered here should be the same as entered on Form R, Part II, Section 8.8, and the quantity should be included in the appropriate media field(s) as well. For example, there was a spill of 100 pounds of toluene onto soil. It was estimated that 90% evaporated and 10% remained in the soil. Include 90 pounds in the fugitive air emissions category, #16, and 10 pounds in the on-site land release category, #20, along with all other estimated quantities for these two categories.)

- 23. 2005 Quantity and Units of Production Associated with the Substance Enter the total quantity, units, and product description for the product(s) manufactured at the facility in which the reported substance was involved in the production process. The units should be the same units of production already identified in the facility's Pollution Prevention Plan. Do not use values of sales to measure the quantity of production. Space is provided to report up to four (4) products for the current reporting year.
- 24. Has any reduction or elimination of either the use of the reported substance or the generation of the reported substance as nonproduct output (NPO) occurred during 2005 due to discontinuance of operations? - Answer this question "Yes" or "No." If any reductions in the use of the substance or the generation of the substance as NPO occurred during the reporting year, relative to the quantities for the previous year, due to the discontinuance of operations, including operations transferred to or undertaken by another facility, report the quantity reduced and the basis of estimate.

2005 Release and Pollution Prevention Report Self Verification of Materials Accounting Data Worksheet

(All Quantities Must Be Reported in Pounds except for Dioxin and Dioxin-Like Compounds Reported in Grams)

FAC_ID:	CAS#:	Substance:
<u>Inputs</u>		Outputs
5. Starting Inventory		8. Quantity Consumed (chemically altered)
6. Quantity Produced On Site		9. Quantity Shipped Off Siteas (or in) Product
7. Quantity Brought On Site		10. Ending Inventory
12. Quantity Recycled Out-of Process &		12. Quantity Recycled Out-of Process & Re-Used on Site
Re-Used on Site		13. Quantity Destroyed through On-Site Treatment
		14. Quantity Destroyed through On-Site Energy Recovery
		15. Stack Air Emissions
		16. Fugitive Air Emissions
		17. Discharge to POTWs
		18. Discharge to Surface Waters
		19. Discharge to Groundwaters
		20. On-Site Land Disposal
		21. Other Off-Site Transfers
Sum of Inputs:	≈	Sum of Outputs:

B.8 Pollution Prevention Activities

25. Has any material-related change (change in the amount of the reported substance used due to substitution of a non-listed substance) been employed to reduce the quantity of this reported substance during 2005 relative to 2004 levels? - Answer this question "Yes" or "No." If the answer is "Yes," enter the quantity of the reported substance that has been reduced in use at the facility in the current year (2005) relative to the previous year (2004) levels due to substitution of another substance that is not on the list of reportable substances. Select the basis of estimate for the quantity reported. Enter the CAS number, the name, and the quantity of the substance that was used as a substitute. Note: Question #25 focuses only on reduction in the use of the reported substance.

Example: The facility reduced the processing of benzene by substituting tetrahydrofuran, a non-hazardous substance. Only 30,000 pounds of benzene were processed in the current year as compared to 40,000 pounds of benzene processed in the previous year. This material substitution required that 8,000 pounds of tetrahydrofuran be processed in the current year. Therefore, under "Quantity of Substance Reduced (pounds) (previous to current year)," report 10,000 pounds (40,000 pounds - 30,000 pounds). Indicate the basis of estimate for the quantity reported (M,C,E or O). In addition, provide the CAS number, the name and the quantity of the substituted substance (e.g., tetrahydrofuran). Enter the following information for benzene substitution:

	CAS NUMBER	SUBSTANCE	QUANTITY (pounds)
a)	109-99-9	Tetrahydrofuran	8,000

Note: Carefully read the "P2-115 / Sections C & D Selection" window as the answers to these questions will impact your Pollution Prevention Progress reporting requirements.

III. REQUIREMENTS TO SUBMIT A POLLUTION PREVENTION PROGRESS REPORT

A Pollution Prevention Progress Report must be submitted by all facilities that are required to have Pollution Prevention (P2) Plan Summaries on file with the DEP. The P2 Process-Level Data Worksheet (P2-115) is the DEP-recommended approach to satisfy the P2 Progress Report requirement. Alternatively, Sections C and D of this RPPR may be submitted to satisfy this requirement. The following sections are based upon your P2 Plan.

Pursuant to N.J.A.C. 7:1K-3.10(d) regarding a targeted or untargeted source or production process, if the quantity of a hazardous substance used or manufactured annually at your facility decreases below the reportable threshold quantity, the owner or operator shall notify the Department in writing of such change and the reason for the change. You must submit the notification in writing to the address listed on page 32 of these instructions.

NOTE TO ALL FACILITIES THAT MUST SUBMIT A POLLUTION PREVENTION PROGRESS REPORT * THERE ARE TWO REPORTING OPTIONS *

The Pollution Prevention Program rules, effective March 2000, include two progress reporting options. Both options are intended to provide information about progress that your facility has made toward the pollution prevention goals that were established in your P2 Plan and reported to the Department in your P2 Plan Summary.

OPTION 1 Instructions for Submission of P2-115 – pages 23 - 26

OPTION 2 Instructions for Submission of Sections C & D - pages 27 - 31

A. Progress Reporting Option 1

- Submission of the Pollution Prevention Process-level Data Worksheet (P2-115)

The Pollution Prevention Process-level Data Worksheet (P2-115) may be submitted in lieu of Sections C and D of the RPPR to fulfill the P2 Plan Progress Report requirement.

Note: As required in N.J.A.C. 7:1K-4.9, the Pollution Prevention Process Level Data Worksheet (P2-115) must first be prepared and included in the P2 Plan that remains on site. One worksheet must be completed for each hazardous substance in each process. Multiple worksheets are therefore required to be in the Plan, except for the simplest case of only one substance in one process at the facility.

A.1 Basic Requirements

- Only basic data needs to be provided on each worksheet. The eRPPR system will perform
 the calculations for preparing Sections C and D following completion of the P2-115. A copy
 of Sections C and D can be printed for the facility files and to send to the County Lead
 Agency. Note: The data required on the P2-115 worksheet are not new and have always
 been required to be in the P2 Plan in order to complete Sections C and D of the RPPR.
- The data for the base year are entered in the Base Year column. The base year data should be submitted along with the data for Year 1. Base Year data are never submitted alone. Base Year data may be newly reported along with the current year of data

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The data for each of the subsequent years of the five-year planning cycle shall be entered in the appropriate columns on the P2-115 Worksheet. When the eRPPR is certified and submitted, each P2-115 worksheet should be printed and included in the P2 Plan on site.

- The P2-115 Worksheet shall be completed and submitted for each process and substance regardless of whether the process is targeted or not. The P2-115 data should sum up to the facility-level data reported on Section B for each substance.
- The P2-115 Worksheet for any substance in any process shall be updated by the date of the next annual submittal as a result of any of the modifications identified in the rule (See N.J.A.C. 7:1K-3.9 through 3.13).
- Once this option is chosen, it is required that this approach be used for all substances and Also, for consistency and continuity of tracking, it is processes in a given year. recommended that a facility that selects the P2-115 option continue to use this option in subsequent years of the five-year planning cycle, and not revert to Option 2.

A.2 How to Complete a P2-115 Worksheet

(See the "P2-115 Example" on page 26.)

In the P2-115 Folder enter the Process ID, Hazardous Substance, and Base Year for each substance in each process. This information will pre-populate in subsequent years.

Process ID Enter the process identification code identified in the P2 Plan and in the P2 Plan Summary. This ID must be the same as the one found in Section C question #1

of your P2 Plan Summary. In this Example, "WIDGETLINE" is the Process ID.

CAS# and Select the hazardous substance used in this process from the substance Substance Name selection list. In the example, we have selected Toluene, CAS# 108-88-3

Base Year Enter the Base Year for this substance as identified in the facility's P2 Plan and in the P2 Plan Summary. This is usually the year upon which the P2 Plan is

based. However, it may be a more recent year if the substance was not in use in the base year. In the P2-115 Example on page 26, the Base Year is 2000.

Select a P2-115 Worksheet and click on "Modify Selection" to enter worksheet data.

Units of Production Enter the unit of production identified in the P2 Plan and in the P2 Plan

> Summary, e.g., type of widget, lbs. of substance, ft² of product. For this example, unit of production would be "widgets manufactured." The units of

production must be consistent over the planning cycle.

Is process targeted? Indicate whether or not the process is targeted according to the P2 Plan

Summary.

Is this a grouped Indicate whether or not the process is grouped according to the P2 Plan

process? Summary.

Enter quantity produced in the unit of "widget," "lbs.," or "ft2," etc. The units must Production quantity

be consistent with "Units of Production" identified above. In this example, 4,682,005 is entered under "Base Year" to refer to the number of widgets produced in Base Year 2000. Under "Year 5," this quantity is 4,978,000 for

Fill in the components of USE and NPO identified on the worksheet for the current year. If the Base Year data has not been entered yet, it must be done now. Interim years do not have to be filled out.

USE

The sum of USE (quantity of hazardous substance consumed, shipped off-site as (or in) a product, and generated as nonproduct output [NPO]) will be calculated by the reporting system. In this example, under "Base Year" 50,100 pounds of toluene is calculated for USE. Under "Year 5," the quantity is 52,380 for reporting year 2005.

NPO

The sum of all the components listed below the "NPO" will be calculated by the reporting system and provided in this field. Different types of NPO occur at a facility, all of which are listed on the P2-115. The 11 rows below the "NPO" row are the components of NPO. Refer to Section B for their definitions and only enter the quantity associated with the process in each question. The NPO under "Base Year" is also 50,100 since all of the use falls into the "otherwise use" category. The various components of Base Year NPO applicable to this example are 49,100 pounds (destroyed: on-site treatment), 505 (stack air emissions) and 495 (fugitive emissions). Under "Year 5" 52,380 is calculated for NPO (49,600 pounds are destroyed; 1,260 pounds are released as stack emissions; and 1,520 pounds are released as fugitive emissions).

Four (4) specific questions on the P2-115 (also found in Sections C and D of the RPPR) pertain to years 1 through 5, if applicable. Entries are not made in the Base Year. These questions are as follows:

P2 techniques used (implemented) in a given year: In this case, for example, "W59" (Modified stripping/cleaning equipment), and "W61" (Changed to aqueous cleaners) were selected. (See codes in Appendix E found online.)

Was this process discontinued or sent off site in given year? Select "Y" or "N" depending upon whether or not such changes occurred.

Did facility make a process change (or changes) that triggered a Plan modification? Select "Y" or "N" depending upon whether or not such changes occurred.

Was facility's P2 progress (targeted process only) less than anticipated? Select "Y" or "N" as appropriate.

CERTIFICATION OF OWNER AND OPERATOR: The certification statement with "signature" will appear on the printed copy upon electronic submission, after the completion of the entire Report. (See Section IV., Submitting This Report, page 32.)

P2-115 Example

POLLUTION PREVENTION PROCESS-LEVEL DATA WORKSHEET (P2-115) FOR 2005

NOTE: THIS WORKSHEET IS <u>REQUIRED</u> AS PART OF THE POLLUTION PREVENTION PLAN, AND IS OPTIONAL AS A SUBMITTAL IN LIEU OF SECTIONS C AND D OF THE RELEASE AND POLLUTION PREVENTION REPORT. ALL OPTIONAL SUBMITTALS ARE NOT CONFIDENTIAL.

	Base	Year <u>2000</u>				
12345600000 2851 32 ACME MANUFACTURING PO BOX 12345 ANYWHERE, NJ 90210	25510	1 A(7654321 CME MANU 23 MAIN ST NYWHERE.	REET	I G	0231
MAILING ADDRESS INFORMA	ATION		FACILITY	/ LOCATIOI	N INFORMA	TION
PROCESS LEVEL INFORMATION:						
Process ID: Up to twelve characters or d	igits may be us	sed W I	<u>D G E T</u>	L I N	<u>E</u>	
Hazardous Substance: Toluene		C	AS No	108-88-	3	
Units of Production (e.g., type of "wid	lget," lbs. of su	bstance, ft ² of p	product)	vidgets mar	nufactured	
Is process targeted? (Y/N) <u>Y</u>	Is thi	s a grouped	process? (Y	//N) <u>Y</u>		
	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Production quantity (widget, lbs., ft ² , etc.,)	4,682,005	4,820,320	4,923,000	3,843,000	4,708,000	4,978,000
USE (pounds)	50,100	50,410	51,240	46,530	48,380	52,380
Consumed	0	0	1,000	0	0	0
Shipped off-site as (or in) product	0	0	0	0	0	0
NPO (pounds)	50,100	50,410	50,240	46,530	45,380	52,380
Recycled out of process	0	0	0	0	0	0
Destroyed: On-site treatment	49,100	49,400	49,500	43,500	46,600	49,600
Destroyed: On-site energy recovery	0	0	0	0	0	0
Stack air emissions	505	555	560	1,550	960	1,260
Fugitive air emissions	495	455	180	1,480	960	1,520
Discharge to POTWs	0	0	0	0	0	0
Discharge to groundwater	0	0	0	0	0	0
Discharge to surface waters	0	0	0	0	0	0
On site land disposal	0	0	0	0	0	0
Transferred off site	0	0	0	0	0	0
End. Inv. as NPO – Beg. Inv. as NPO	0	0	0	0	0	0
P2 techniques used in given year (see code in Appendix F)		W59, W61	W59, W61	W59, W61	W59, W61	W59, W61
Was this process discontinued or sent off site in given year? (Y/N)		N	N	N	N	N
Did facility make process change(s) that triggered Plan modification? (Y/N)		N	N	N	N	N
Was facility's P2 progress (targeted process only) less than anticipated? (Y/N) (Attach explanation.)		N	N	N	N	N
CERTIFICATION OF OWNER OR OPERATO true, accurate and complete to the best of my knowl Signature: <u>submitted and certified electronically</u> Name (print): <u>John Doe</u>	edge.	Date: 6/30			omitted on this 9) 123 – 4567	

B. Progress Reporting Option 2

- Submission of Sections C and D of the RPPR

<u>Note</u>: Even if the P2-115 Worksheet(s) are not submitted, the P2-115 Worksheet(s) must still be prepared and be in the Pollution Prevention Plan.

Sections C and D include information about progress that has been made toward the pollution prevention goals established in your P2 Plan and reported to the DEP in the P2 Plan Summary (DEP-113). The instructions on the following pages pertain only to Reporting Option 2 – Sections C and D of the Release and Pollution Prevention Report (RPPR). To simplify the progress report calculations, the information on the P2-115s contained in the P2 Plan will be used to calculate Sections C and D.

<u>Calculations must be included in the P2 Plan and the results of the calculations must be submitted on the eRPPR. Even if no options have been implemented or zero goals were set, calculations for all substances must be performed annually to determine progress on USE and NPO, and must be included in the P2 Plan.</u>

The most accurate way to report this progress for pollution prevention planning is by using <u>process-level</u>, substance-specific data (substance use per unit of product and nonproduct output per unit of product). Choosing an appropriate unit of product in the P2 Plan is critical to developing a useful production ratio. This information should have already been collected for all of the production processes and incorporated it into the Pollution Prevention Plan (see N.J.A.C. 7:1K-4.3(b)3ii and 4.3(b)4).

B.1 Section C. Facility-Level Substance-Specific Pollution Prevention Progress

The Section C Folder will present the CAS# and Substance Name for each substance for which a Section B was entered. If this list is correct, select a substance (by its "radio button") and click "Modify Selection" to update the Section C data.

- 1. CAS # and Substance Name will be pre-populated.
- 2. Production Ratio The production ratio normalizes the variation in units produced from one year to the next.

The example below illustrates the use of process-level data to develop facility-level progress from the P2-115s. Refer to the abbreviated P2-115s on page 29 to identify the variables (by letter) in the formulae.

- 2.A. The formula for calculating the Production Ratio relative to the Base Year (PR_{BY}) is as follows:
 - A 1. For the simplest scenario, when one substance is only used in one process, the formula for calculating the Production Ratio to the Base Year (PR_{BY}) is as follows:

$$PR_{BY} = \frac{H}{A}$$

A - 2. For those facilities that use one substance in multiple processes, the following formula applies:

$$PR_{BY} = \frac{[(H/A * C) + (T/M * O)]}{(C + O)}$$

- 2.B. The formula for calculating the Production Ratio relative to the Previous Year (PR_{PY}) is as follows:
 - B -1. The formula for calculating the Production Ratio to the previous year for a substance in a single process is:

$$PR_{PY} = \frac{\ddot{H}}{G}$$

B - 2. For calculating the Production Ratio using one substance in multiple processes, the formula is:

$$PR_{PY} = \frac{[(H/G *I) + (T/S *U)]}{(I+U)}$$

If the same substance is used in more than two (2) processes, treat the additional processes identical to the way the second process was added to the example of the single process (i.e., add all process-level information to obtain facility-level information).

- Percent Change for Use and NPO Calculate the percent change (reduction, increase or no change) in total facility-wide use and total facility-wide NPO generated for each substance from the Base Year to this Reporting Year (current year).
 - A -1. Percent Change for USE for a substance for a single process:

Percent Change for USE =
$$\frac{[(C * PR_{BY}) - J]}{C * PR_{BY}} *100$$

A - 2. Percent Change for USE for a substance in multiple processes:

Percent Change for USE =
$$\frac{\left[(C + O) * PR_{BY} - (J + V) \right]}{(C + O) * PR_{BY}} * 100$$

B - 1. Percent Change for NPO for a substance in a single process:

Percent Change for NPO =
$$\frac{[(E * PR_{BY}) - L]}{E * PR_{BY}} * 100$$

B -. 2. Percent Change for NPO for a substance in multiple processes:

Percent Change for NPO =
$$\frac{\left[\left(E+Q\right)*PR_{BY}-\left(L+X\right)\right]}{\left(E+Q\right)*PR_{BY}}*100$$

<u>Note:</u> A positive result means a reduction, a negative result means an increase. If P2 progress is negative, the electronic system will require a check box to be checked and an explanation given.

The following two P2-115s are abbreviated to illustrate the variables needed to calculate the Production Ratio (PR) and the Percent Change for USE and NPO.

PROCESS LEVEL INFORMATION:	Base Yea					
Process ID: Up to twelve characters or dig	gits may be use	ed <u>W I</u>	D G E	<u>T L I 1</u>	N E	
Hazardous Substance:Tolu				108-88		
Units of Production (e.g., type of "widget,"	lbs. of substan	ice, ft ² of pro	oduct)	Widgets	<u> </u>	
Is process targeted? (Y/N) <u>Y</u>	Is this a g	rouped p	rocess? (Y/N) <u>Y</u>		
Is process targeted? (Y/N) Y	Is this a g	rouped p	2004	Y/N) <u>Y</u> 2005	2006	2007
Is process targeted? (Y/N) Y Production quantity (widget, lbs., ft², etc.)	Base Year			· · · · · · · · · · · · · · · · · · ·	2006	2007
	Base Year	2003	2004	2005	2006	2007
Production quantity (widget, lbs., ft ² , etc.)	Base Year A	2003 B	2004	2005 H	2006	2007
Production quantity (widget, lbs., ft ² , etc.) USE (pounds)	Base Year A	2003 B	2004	2005 H	2006	2007

POLLUTION PREVENTION PROC	Base Yea		VOINIC	(0, 1 011 20	
PROCESS LEVEL INFORMATION:	2466 . 64					
Process ID: Up to twelve characters or di	igits may be use	ed <u>T H</u>	<u> </u>	<u>A M A</u>	<u>B O B</u>	<u>S</u>
Hazardous Substance: Tolu	uene CAS No. <u>108-88-3</u>					
		_				
Units of Production (e.g., type of "widget,"	" lbs. of substar	nce, ft ² of pi	oduct)	Thingam	abobs	
Units of Production (e.g., type of "widget, Is process targeted? (Y/N) Y		•	,	·		
		•	,	·		2007
Is process targeted? (Y/N) Y	Is this a g	grouped _l	orocess? ((Y/N) <u>Y</u>		2007
Is process targeted? (Y/N) Y Production quantity (widget, lbs., ft², etc.)	Is this a g	grouped p	process? ((Y/N) Y 2005		2007
Is process targeted? (Y/N) Y Production quantity (widget, lbs., ft², etc.)	Is this a g	grouped 2003 N	2004 S	(Y/N) <u>Y</u> 2005 T		2007
Is process targeted? (Y/N) Y Production quantity (widget, lbs., ft², etc.) USE (pounds)	Is this a g	grouped 2003 N	2004 S	(Y/N) <u>Y</u> 2005 T		2007

B.2 Section D. Process-Level Pollution Prevention Information for Targeted Processes

Complete one Section D for each targeted process or targeted grouped process identified in the facility's Pollution Prevention (P2) Plan and P2 Plan Summary. This RPPR must have the same number of Sections D as there are Sections D in the Base Year P2 Plan Summary.

- 1. In the Section D Targeted Process Folder, enter the process identification code identified in the P2 Plan and in the P2 Plan Summary for each targeted process. Select a process and then click "Modify Selection" to add Section D data.
- Following the "Process ID," check the first box if the facility made a production process change last year that changes information contained in the P2 Plan and P2 Plan Summary. Any changes made by a facility last year as specified in N.J.A.C. 7:1K-3 would require modifications to the P2 Plan and P2 Plan Summary. If the facility made at least one of these changes as identified in the cited rule, the P2 Plan must be modified and a revision of the P2 Plan Summary must be submitted to the DEP. (See applicable requirements in N.J.A.C. 7:1K-3.) If this applies to the facility, contact the Office of Pollution Prevention and Right To Know at (609) 777-0518.
- Use the next check box if the facility's reporting year P2 progress for any substance involved with this
 process was less than anticipated. If this box is checked, an explanation is required in the text box
 below the check box stating why progress was less than anticipated.
- 2. CAS# and Substance Name(s) may be pre-populated. If not, click "Add Substance" to select the substance(s).

To complete this Section D, refer to the units of product, which were identified in the P2 Plan. Once the appropriate units of product have been determined from the P2 Plan, the units <u>cannot</u> be changed in subsequent years, unless the P2 Plan, P2 Plan Summary and previous P2 Progress Reports have been modified.

 Percent Change for USE - State the total progress made toward achieving each substance-specific process-level pollution prevention goal for USE identified in the P2 Plan and in the P2 Plan Summary submitted to the DEP. (Refer to the P2-115 for Toluene in process "Thingamabobs" for the variables in the following formula – page 29.)

Percent Change for Use =
$$\frac{[(O/M) - (V/T)]}{(O/M)} * 100$$

 Percent Change for NPO - State the progress made toward achieving each substance-specific process-level pollution prevention goal for NPO identified in the P2 Plan and in the P2 Plan Summary submitted to the DEP. (Refer to the P2-115 for Toluene in process "Thingamabobs" for the variables in the following formula – page 29.)

Percent Change for NPO =
$$\frac{[(Q/M) - (X/T)]}{(Q/M)} * 100$$

Calculations must be included in the P2 Plan and the results of the calculations must be entered on the electronic reporting form. Even if the facility has implemented no options or has set zero goals, calculations for all substances must be performed annually to determine progress on USE and NPO, and must be included in the P2 Plan.

- Pollution Prevention Techniques Used in Current Year For each substance used within the targeted production process, select the method(s) used to achieve the USE and/or NPO reductions in the current year (i.e., 2005), by clicking on the "Select Techniques" button. If no USE or NPO reductions occurred in the current year, leave this box blank.
- Pollution Prevention Techniques Planned for Next Year For each substance used within the targeted production process, select the method(s) that are planned to be implemented next year (i.e., 2006) to achieve the USE or NPO reductions stated in Section D of the facility's P2 Plan Summary, by clicking on the "Select Techniques" button. If a reduction goal of zero was stated for any substance, leave this box blank.

When Section D data entry is completed, click on the "Continue" button. This will return the Section D Targeted Process Folder. When all targeted processes are completed, click on the "Continue" button. The RPPR and P2 Plan Summary Folder will display, showing the RPPR status as "Awaiting Certification." See the following page for the submission procedure for the RPPR.

IV. SUBMITTING THIS REPORT

DEP regulations require electronic submission of the RPPR for 2004 and thereafter. See page i at the front of these instructions for guidance on e-reporting of the RPPR!

For electronic certification and submittal the person who is the responsible party must have his/her own User Profile set up (see page *i*), with his/her **own name** under User Name, that is, not the facility name or some other name. This will be the name that prints out for the certification. The certifying authority should select a PIN that is easy to remember, but that is known only to her or him.

When the RPPR has been completed and is ready for certification and submittal, the certifying official must access the facility report by logging in with his/her own User ID and PIN, selecting the "Release and Pollution Prevention Report and Pollution Prevention Plan Summary" radio button, clicking the "Continue" button, and clicking the "Access Facility" button.

Once the facility report screen has been accessed, the certifying official will see that the Report Status is "Awaiting Certification." (If the Status is <u>NOT</u> "Awaiting Certification," contact the Office at the phone number below for assistance.) Click the "Certification and Submittal" button to get to the certification folder, select the report(s) to be certified and click "Continue."

Check the appropriate boxes for the certifying statements, enter the PIN and Title of the certifying authority. (Note: the name of the certifying party will show up on this screen as the User ID, but will show up on the certification signature as the User Name.) Click on the "Certify" button and a screen will appear stating that "The Report certification was successful." Click "Continue" to get to the RPPR and P2 Plan Summary Folder. The Status will now be "Submitted."

Use the printer icon to the left of the Report hyperlink to format the report for printing.

Whether the eRPPR or a paper version is submitted, at least two (2) copies of the completed RPPR must be made (one copy for the local county lead agency and one copy for the facility). For a paper submission, only in the case of a Trade Secret Claim or Hardship Exemption, be sure to include any pages and attachments on which additional information is reported. Any attachments necessary to the eRPPR must be forwarded to the address below.

In the case of a paper submission, it is required to return the <u>completed original</u> RPPR to the DEP at the address below. Be sure to include documentation for any trade secret claims on the Trade Secret Claim Form (DEQ-119). You may obtain the DEQ-119 package from the Office of Pollution Prevention and Right To Know's website at http://www.state.nj.us/dep/opppc/forms/tradeclaim.pdf or call the Office at (609) 777-0518. An incomplete trade secret claim submission will invalidate the claim. The mailing address for paper submissions, and other communications, is:

State of New Jersey
Department of Environmental Protection
Office of Pollution Prevention and Right To Know
Station Plaza 4, 22 S. Clinton Avenue - 3RD Floor
P.O. Box 443
Trenton, New Jersey 08625-0443

Send one copy of the RPPR to the County Lead Agency (see Appendix D online) for the county where the facility is located.

Keep one copy of the RPPR for the facility records. The law requires that the report be made available to employees and inspectors upon request.

For additional assistance or any questions about completing the RPPR, contact the DEP's Office of Pollution Prevention and Right To Know at (609) 777-0518.